

Title (en)

Polishing method, polishing composition and polishing composition kit

Title (de)

Poliervverfahren, Polierzusammensetzung und Kit für die Polierzusammensetzung

Title (fr)

Méthode de polissage, composition de polissage et kit pour la composition de polissage

Publication

EP 1770768 A3 20080702 (EN)

Application

EP 06121519 A 20060929

Priority

JP 2005289170 A 20050930

Abstract (en)

[origin: EP1770768A2] A polishing method for polishing a polysilicon film provided on a silicon substrate having an isolation region is provided. The method includes preliminarily polishing the polysilicon film using a preliminary polishing composition containing abrasive grains, an alkali, a water-soluble polymer, and water till a part of the top surface of the isolation region is exposed; and finally polishing the preliminarily polished polysilicon film using a final polishing composition containing abrasive grains, an alkali, a water-soluble polymer, and water till the whole top surface of the isolation region is exposed. The content of the water-soluble polymer in the preliminary polishing composition is 0.0075-0.05 % by mass, and the content of the water-soluble polymer in the final polishing composition is 0.002-0.01 % by mass.

IPC 8 full level

B24B 37/00 (2012.01); **C09G 1/02** (2006.01); **C09K 3/14** (2006.01); **H01L 21/304** (2006.01); **H01L 21/321** (2006.01)

CPC (source: EP KR US)

B24B 37/00 (2013.01 - KR); **C09G 1/02** (2013.01 - EP US); **C09K 3/14** (2013.01 - KR); **H01L 21/304** (2013.01 - KR); **H01L 21/3212** (2013.01 - EP US)

Citation (search report)

- [Y] US 2005130428 A1 20050616 - CHOI JAEKWANG [KR], et al
- [Y] EP 1505639 A1 20050209 - HITACHI CHEMICAL CO LTD [JP]
- [A] EP 1211717 A1 20020605 - HITACHI CHEMICAL CO LTD [JP]
- [A] US 2002192962 A1 20021219 - MIYASHITA NAOTO [JP], et al

Cited by

EP2722872A4; US9640407B2; EP3124570B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1770768 A2 20070404; **EP 1770768 A3 20080702**; CN 1939663 A 20070404; JP 2007103515 A 20070419; KR 20070037409 A 20070404; SG 131099 A1 20070426; TW 200725721 A 20070701; US 2007077764 A1 20070405

DOCDB simple family (application)

EP 06121519 A 20060929; CN 200610142185 A 20060929; JP 2005289170 A 20050930; KR 20060096000 A 20060929; SG 2006067748 A 20060928; TW 95136127 A 20060929; US 54041006 A 20060929